Communicable Diseases and Epidemiology
401 Fifth Avenue South, Suite 900
Seattle, WA 98104-1818
206-296-4774 Fax 206-296-4803
TTY Relay: 711
www.kingcounty.gov/health

Public Health
Seattle & King County

Health Advisory: Outbreak of Human Enterovirus D68 (EV-D68) Activity in the US, 8 September 2014

Action requested:

- **Be aware of an increase in EV-D68 activity in multiple states, primarily in the Midwest and South.**
- **EV-D68 primarily causes respiratory tract infection in children. During the current outbreaks, it has resulted in spikes in ED visits and hospitalizations, many for exacerbations of wheezing/asthma.**
- **At this time, we have no indication of increased levels of respiratory illnesses locally.**
- **Healthcare facilities should report unusual increases in respiratory illnesses among children to Public Health at 207-296-4774.**
- **Healthcare facilities and providers should review plans for management of a surge of pediatric patients with respiratory illnesses and asthma exacerbations, including outpatient and ED visits and hospitalizations.**

Background

- Enteroviruses are common human pathogens that are closely related to human rhinoiviruses. Disease activity typically peaks in summer-fall, and the majority of infections are asymptomatic or mild. Until the current outbreak, cases of infection with EV-D68 have been reported sporadically.
- Clinical manifestations of symptomatic enterovirus disease vary widely and can include mild upper respiratory illness, febrile rash illness, and neurologic illness, such as aseptic meningitis and encephalitis.
- EV-D68 infection has been associated almost exclusively with respiratory illness ranging from relatively mild illness that did not require hospitalization to severe illness requiring intensive care and mechanical ventilation.
- Increasing reports of EV-D68 activity in the US indicate that cases may appear locally/regionally, although at this time we are not aware of an increase in or unusual clusters of severe respiratory illnesses.
- The virus likely spreads from person to person when an infected person coughs, sneezes, or touches surfaces.
- Testing outpatients (not requiring hospitalization) for respiratory enterovirus infection is not necessary. Hospitalized patients can be tested through reference laboratories using available methods (PCR and cell culture); available PCR assays may be non-specific for enterovirus D68. Public Health can assist with testing of patients with severe illness suspect to be EV-D68.
- Prevention is through general respiratory and hand hygiene. There is no vaccine or specific therapy other than supportive care and management of complications. Healthcare providers should use standard and droplet precautions.

  Prevention messages for the public:
  - Wash hands often with soap and water for 20 seconds, especially after changing diapers
  - Avoid touching eyes, nose and mouth with unwashed hands
  - Avoid kissing, hugging, and sharing cups or eating utensils with people who are sick
  - Disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick

Resources

- CDC non-polio enterovirus web page: http://www.cdc.gov/non-polio-enterovirus/index.html
- CDC MMWR (Clusters of Acute Respiratory Illness Associated with Human Enterovirus 68 --- Asia, Europe, and United States, 2008—2010) http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6038a1.htm
- Prevention and treatment of non-polio enterovirus infections (CDC): http://www.cdc.gov/non-polio-enterovirus/about/prevention-treatment.html